

Patent claims

1. A connectable bucket tappet (1) for a valve drive of an internal combustion engine, having a ring shaped section (2) which has a skirt (8) for oscillatory mounting in a holder of an internal combustion engine and, in its bore (3), accommodates a circular section (5) such that it can move axially, it being possible for the two sections (2, 5) to be coupled to each other in at least one axial displacement position in relation to each other via at least one slider (10) which can be displaced radially or in the manner of a secant and which runs in the circular section (5) in the uncoupled state, holders (13, 9) for the slider (10) being provided in the region of bases (6, 7) of the sections (2, 5) and an outer surface (4) of the circular section (5) being enclosed by at least one compression spring (18) which, at one end, acts against the base (6) of the ring shaped section (2) and, at the other end, acts against a support (19) of the circular section (5) which is remote from the base, characterized in that the holder (13) of the ring shaped section (2) is formed as a separate, sleeve-like component (14), which extends only over a small part of an annular width (b) of the ring shaped section (2) and runs with its inner edge (23) immediately in front of the outer surface (4) of the circular section (5), the component (14) being enclosed at least sectionally by the compression spring (18) radially on the outside and in the axial direction of the bucket tappet (1).

2. The bucket tappet as claimed in claim 1, characterized in that exactly one slider (10) is provided in the circular section (5), has piston-like geometry and opposite which in the ring shaped section (2) there is the component (14) formed as a thin-walled pot.

3. The bucket tappet as claimed in claim 1, characterized in that, from an inner edge (16) of the base (6) of the ring shaped section (2), in the axial direction of the bucket tappet (1), there extends an annular extension (15) with the bore (3), said annular extension (15) extending only over a portion of a height of the bucket tappet (1) and accommodating the component (14).

4. The bucket tappet as claimed in claim 1, characterized in that a surface section (25) on the base side of the component (14), together with an overhang (26) reaching over the latter and belonging to the circular section (5) forms an axial stop for the ring shaped with respect to the circular section (2, 5).

5. The bucket tappet as claimed in claim 1, characterized in that the outer surface (4) of the circular section (5) in the region of the component (14) has a flat (24) on which the inner edge (23) of the component (14) bears.

6. The bucket tappet as claimed in claim 1, characterized in that the slider (10) is enclosed by a helical spring (11) which loads said slider (10) in the uncoupling direction.

7. The bucket tappet as claimed in claim 1, characterized in that the component (14) consists of a lightweight structural material such as sheet metal.

8. The bucket tappet as claimed in claim 1, characterized in that the support of one end of the compression spring (18) against the base (6) of the ring shaped section (2) consists of a thin-walled annular part (17), two diametrically opposite, thin-walled radial webs (16a, 16b), on which the annular part (17) bears, offset by approximately 90° in the circumferential direction with respect to the component (14), originating from the base (6).

9. The bucket tappet as claimed in claim 8, characterized in that the radial webs (16a, 16b) bound two chambers (20, 21) shaped like circular segments for hydraulic fluid in the circumferential direction, at least one chamber (20 or 21) being used to load the slider (10) with hydraulic fluid.

10. The bucket tappet as claimed in claim 1, characterized in that a hydraulic play compensating element (22) is installed in the circular segment (5).